



# Science

# Preparatory 1



[www.Cryp2Day.com](http://www.Cryp2Day.com)

موقع مذكرة جاهزة للطباعة

1- The gases that cause respiratory system malfunction are .....

- a. carbon oxides
- b. sulphur oxides
- c. nitrogen oxides
- d. (b), (c)

2- Oxides which affect the nervous system and the eye.

- a. Sulphur oxides
- b. Nitrogen oxides
- c. carbon oxides
- d. no correct answer

3- What is the name of the chemical reaction in which elements and compounds join together to create a single product?

- a. Decomposition reaction
- b. Direct combination reaction
- c. Substitution reaction
- d. Neutralization reaction

4- The chemical reaction equation below shows nitrogen monoxide reacting with oxygen:



Which of the following types of direct combustion reactions does this equation represent?

- a. A mixture with an element
- b. An element with a compound
- c. An element with another element
- d. A compound with another compound

5- The car brake performance is an application of .....

- a. attraction forces
- b. friction forces
- c. centrifugal forces
- d. nuclear force

6- ..... is/are example/s of forces inside living systems.

- a. Pulse inside blood vessels
- b. Inertia
- c. Brakes
- d. All the previous

7- Static objects resist the change of its ..... from rest to motion.

- a. mass
- b. density
- c. state
- d. All the previous



8- Earth's gravity acceleration changes from a place to another on the Earth's surface because of the ..... .

- object's mass
- Earth's mass
- the distance from the earth's center
- varied temperature

9- The electromagnet is used in making the ..... set.

- calculator
- microscope
- electric bell
- night vision

10- Iron filings are attracted to an iron bar when the electric current flows, due to the effect of .....

- gravity force
- electricity force
- electromagnetic force
- nuclear force

11- The attraction force between an object and the Earth is equal to the ..... .

- electromagnet
- weight
- weak nuclear
- strong nuclear

12- An object's weight on the Earth's surface is related to ..... force.

- electromagnet
- weak nuclear
- Earth's attraction
- strong nuclear

13- All of the following are examples of the universal forces in nature except for .....

- thunder
- lightning
- wind motion
- changing direction of the ball

14- All of the following are electromagnetic waves except for the .....

- thermal rays (infra-red)
- visible light
- sound waves
- ultraviolet rays

15- When two cars move in the same direction with a velocity of 100 Km/h, the driver of the first car imagines the second car to be

.....

- a. not moving
- b. moving backwards
- c. moving forward
- d. No correct answer

## 16- A force is an effect that .....

- a. Changes the phase of an object's motion only.
- b. Never changes the phase of the object's motion.
- c. Changes both the object's motion and its direction.
- d. Changes the phase of the object's direction.

17- ..... is an example of a pneumatic musical instrument.

18- What chemical is produced when magnesium reacts with oxygen?

- a. Oxygen magnesium
- b. Magnesium oxide
- c. Magnesium oxygen
- d. Oxide magnesium

19- Which of the following speeds is closest to the speed of light waves in a vacuum?

- a. Three hundred thousand meters per second
- b. Three thousand meters per second
- c. Three hundred million meters per second
- d. Three million meters per second

20- Which of the following chemical equations shows the reaction between ammonia and hydrogen chloride to form ammonium chloride?

- a.  $\text{NH}_3 + \text{HCl} \longrightarrow \text{NH}_4\text{Cl}$
- b.  $\text{NH}_4\text{Cl} + \text{H}_2\text{O} \longrightarrow \text{HCl} + \text{NH}_4\text{OH}$
- c.  $\text{HCl} + \text{NaCl} \longrightarrow \text{NaOH} + \text{H}_2\text{O}$
- d.  $\text{N}_2 + 3\text{H}_2 \longrightarrow 2 \text{ NH}_3$

21- Which of the following is a unit of force?

- a. The newton
- b. The kilogram
- c. The watt
- d. The joule

22- If an object is not moving, it.....start to move unless a force acts on it.

- a. will
- b. will not
- c. (a) & (b)
- d. No correct answer

23- If an object is moving, it will not change..... or..... unless a force acts on it.

- a. speed, direction
- b. position, direction
- c. position, inertia
- d. no correct answer

24- An object with a mass of 20 kg falls toward Earth. What is the acceleration of the object if the only force acting on it is gravity?

- a.  $7.8 \text{ m/s}^2$
- b.  $8 \text{ m/s}^2$
- c.  $9.8 \text{ m/s}^2$
- d. No correct answer

25- A person stands on the north pole of Earth and a second person stands on the equator. The directions that the gravitational forces on the two people act in are.....

- a. the same as each other
- b. opposite to each other
- c. at 90 degrees to each other
- d. no correct answer

26- The weight of an object is the gravitational.....that acts on it.

- a. force
- b. mass
- c. energy
- d. no correct answer

27- The electric motor works on changing..... energy to.....energy.

- a. Mechanical; electric
- b. Electric; heat
- c. Electric; mechanical
- d. No correct answer

28- The electric generator works on changing.....energy to .....energy.

- a. Mechanical; electric
- b. Electric; heat
- c. Electric; mechanical
- d. No correct answer

29- Objects weight.....

- a. The amount of Earth's attraction to the object.
- b. The point at the center of an object where the force of gravity affects the object.
- c. (a) & (b)
- d. No correct answer

30- Find the mass of an object if its weight = 60 N, knowing that the earth's gravity acceleration is  $9.8 \text{ m/s}^2$

- a. 12.6 Kg
- b. 6.12 Kg
- c. 6.12 N
- d. No correct answer

31- When the electric current passes through a wire near a magnetic needle it deflects.

- a. Due to the gravity.
- b. Due to the magnetic effect of the electric current
- c. Due to the attraction force
- d. No correct answer

32- Carbon monoxide has a dangerous impact on human being and it may cause.....

- a. Building corrosion
- b. Bombing
- c. Headache and fainting
- d. No correct answer

33- Which of the following statements about nuclear forces is correct?

- a. The strong nuclear force is a different type of force from the weak nuclear force, but both are types of fundamental forces.
- b. The strong nuclear force is a different type of force from the weak nuclear force, and only the strong nuclear force is a type of fundamental force.

c. The strong nuclear force is the same type of force as the weak nuclear force, just stronger.

d. No correct answer.

34- Which of the following are types of fundamental forces?

a. Opposing forces

c. Up thrust forces

b. Constant forces

d. Magnetic forces

35- Which of the following are types of force responsible for radioactive decay of atomic nuclei?

a. Weak nuclear forces

c. Electrical forces

b. Strong nuclear force

d. Magnetic forces

36- The particles in the diagram show the reaction between carbon and oxygen to form carbon dioxide. Heat is required for this reaction to take place. What does the heat do?



a. It turns the carbon into soot during burning.

b. It sticks the carbon atom to the oxygen atoms.

c. It forms the bonds between the carbon and oxygen atoms.

d. It breaks the double covalent bond in the oxygen molecule.

37- Which of the following are types of fundamental forces?

a. Constant forces

c. Gravitational forces

b. Friction forces

d. Upthrust forces

38- Which of the following is a unit of weight?

a. The kilogram

b. The newton

c. (a) and (b)

d. No correct answer

39- Which of the following is a unit of mass?

a. The kilogram

c. (a) and (b)

b. The newton

d. No correct answer

40- What does the triangle above the arrow in a chemical equation mean?

- a. Three substances present
- b. Heat required
- c. Diluted substances
- d. Concentrated substances

41- Which of the following statements best describes the way in which mass is conserved during chemical reactions?

- a. The total mass of reactants is equal to the total mass of products plus the mass of oxygen.
- b. The total mass of reactants is greater than the total mass of products.
- c. The total mass of reactants is always the same as the solid products produced.
- d. The total mass of reactants is equal to the total mass of products.

42- A teacher places a cup of coffee onto an electronic balance at the front of the science laboratory. The teacher then adds three large teaspoons of sugar to the coffee. The volume of the coffee does not appear to increase.

What happens to the mass displayed on the front of the balance?

- a. The mass on the balance decreases.
- b. The mass on the balance stays the same.
- c. The mass on the balance increases.
- d. No correct answer.

43- In a chemical reaction, 64 g of zinc is reacted with excess oxygen to form 80 g of zinc oxide. How much oxygen is used in this reaction?

- a. 144 g
- b. 80 g
- c. 16 g
- d. 64 g

44- The greater the mass of an object, the..... the weight of the object.

- a. less
- b. greater
- c. smallest
- d. no correct answer

45- The diagram shows two objects at different positions around Earth. The force of gravity acts on the black object in the direction of the black arrow. Which color arrow correctly shows the direction in which the force of gravity acts on the green object?

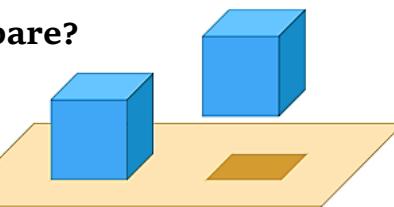


- a. Red
- b. Blue
- c. (a) and (b)
- d. No correct answer

46- A process in which breaking of bonds between reactants' molecules and forming of new bonds between products' molecules occurs.

- a. Chemical reaction
- b. Chemical equation
- c. Law of constant ratio.
- d. No correct answer.

47- Two boxes have the same mass. One box falls toward the ground from a point near the ground. The other box is at rest on the ground. In which of the following ways do the weights of the boxes compare?

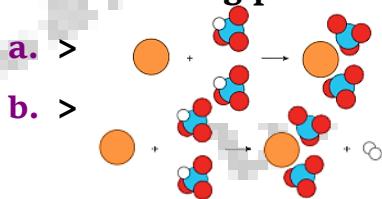


- a. Both boxes have the same weight.
- b. The falling box has less weight.
- c. The falling box has greater weight.
- d. No correct answer.

48- Which of the following equations showing the formation of carbon dioxide is correctly balanced?.

- a.  $2C + O_2 \longrightarrow CO_2$
- b.  $C + O_2 \longrightarrow CO_2$
- c.  $C + O_2 \longrightarrow CO$
- d.  $C + O \longrightarrow CO_2$

49- Which of the following particle diagrams shows the law of conservation of mass being preserved?



Dr. Madonna Youhanna



c.  $>\text{O} + \text{H}_2\text{O} \rightarrow \text{HO} + \text{O}$

d. No correct answer



## Answers

1	B
2	B
3	B
4	B
5	B
6	A
7	C
8	C
9	C
10	C
11	B
12	C
13	D
14	C
15	A
16	C
17	D
18	B
19	C
20	A
21	A
22	B
23	A
24	C
25	C
26	A
27	C
28	A
29	A
30	B



31	B
32	C
33	A
34	D
35	A
36	D
37	C
38	B
39	A
40	B
41	D
42	C
43	C
44	B
45	B
46	A
47	A
48	B
49	B
50	
51	

**Note: Part 1**

**Grade: 7**

**Part 2: Friday 9/4/2021**

**Good Luck ☺**

